

U. S. DEPARTMENT OF ENERGY  
WORK BREAKDOWN STRUCTURE DICTIONARY  
PART II - ELEMENT DEFINITION

<b>1. PROJECT TITLE/PARTICIPANT</b> Environmental Management/Bechtel Jacobs Company LLC		<b>2. DATE</b> 10/23/02	<b>3. IDENTIFICATION NUMBER</b> DE-AC05-98OR22700																																
<b>4. WBS ELEMENT CODE</b> 04.03.10.01		<b>5. WBS ELEMENT TITLE</b> Paducah Waste Infrastructure																																	
<b>6. INDEX LINE NO.</b> N/A	<b>7. REVISION NO. AND AUTHORIZATION</b> Rev 4		<b>8. DATE</b> 06/10/03																																
<b>9/. APPROVED CHANGES</b> N/A																																			
<b>10. SYSTEM DESIGN DESCRIPTION</b> N/A		<b>11. BUDGET AND REPORTING NUMBER</b> N/A																																	
<b>12. ELEMENT TASK DESCRIPTION</b>  <b>WBS GRAPHIC</b>  See Attached  <b>INTRODUCTION</b> This project will support the complaint storage of DOE legacy waste and landfill operations. Storage operations comprised of 12 waste storage facilities (C-333, C-337, C-733, C-746-A, C-746-B, C-746-H3, C-746-M, C-746-Q, C-746-V, C-752, C-752-A, and C-753-A) with approximately 500,000 sq. ft. of storage area. Landfill operations comprised of twenty five acre of operating phases and 100 acres of permitted area and S&M of two closed landfills.  Waste Infrastructure WBS: 04.03.10.01 ? To provide project management, task and baseline planning, project controls oversight of subcontractors, and technical support for waste facilities improvement activities. ? To complete landfill facilities upgrades/improvements. ? Design and construct roof replacements for C-746-Q and C-733. ? D&D of the C-746-A West End Smelter. ? To complete the construction of the C-733 and C-746-Q Fire Protection Upgrades ? To complete the construction of the C-746-A and C-746-B Electrical Upgrades																																			
<b>ACRONYMS</b>  <table style="width: 100%; border: none;"> <tr><td style="width: 15%;">BJC</td><td>Bechtel Jacobs Company LLC</td></tr> <tr><td>BCP</td><td>Baseline Change Proposal</td></tr> <tr><td>DMSA</td><td>DOE Material Storage Area</td></tr> <tr><td>DOE</td><td>United States Department of Energy</td></tr> <tr><td>D&amp;D</td><td>Decontamination and Decommission</td></tr> <tr><td>ER</td><td>Environmental Restoration</td></tr> <tr><td>FY</td><td>Fiscal Year</td></tr> <tr><td>ISMS</td><td>Integrated Safety Management System</td></tr> <tr><td>LCB</td><td>Lifecycle Baseline</td></tr> <tr><td>LLW</td><td>Low-Level Waste</td></tr> <tr><td>ORO</td><td>Oak Ridge Operations</td></tr> <tr><td>PBI</td><td>Performance Based Incentive</td></tr> <tr><td>RCRA</td><td>Resource Conservation Recovery Act</td></tr> <tr><td>REA</td><td>Request for Equitable Adjustment</td></tr> <tr><td>S&amp;M</td><td>Surveillance and Maintenance</td></tr> <tr><td>WBS</td><td>Work Breakdown Structure</td></tr> </table>				BJC	Bechtel Jacobs Company LLC	BCP	Baseline Change Proposal	DMSA	DOE Material Storage Area	DOE	United States Department of Energy	D&D	Decontamination and Decommission	ER	Environmental Restoration	FY	Fiscal Year	ISMS	Integrated Safety Management System	LCB	Lifecycle Baseline	LLW	Low-Level Waste	ORO	Oak Ridge Operations	PBI	Performance Based Incentive	RCRA	Resource Conservation Recovery Act	REA	Request for Equitable Adjustment	S&M	Surveillance and Maintenance	WBS	Work Breakdown Structure
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**LOGIC RELATIONSHIPS**

Landfill expansion needs to be completed prior to ER, D&D and DMSAs generation of landfill waste. The Commonwealth of Kentucky approval of landfill permit modification for the construction and operations of the new landfill phases.

The Commonwealth of Kentucky approval of the RCRA Closure Plan prior to start of RCRA closure. D&D of C-746-A West End Smelter will be performed under a time critical removal action.

**SCOPE DESCRIPTION**

**Release Sites and Facilities**

Assessments to be completed  
NA

Actions to be completed  
NA

**Past and Future Accomplishments**

Past Accomplishments

- ? Completed 50% design of a Waste Sorting Facility.
- ? Completed construction of the C-746-U landfill sedimentation pond discharge improvement.
- ? Completed shower trailer installation and C-746-U-T14.
- ? Completed leachate collection system upgrades.
- ? Completed the replacement of the C-746-H3 Pad two Clamshells roof panels.
- ? Performed structural/roof inspections of waste storage facilities C-746-A, C-746-B, C-746-Q, and C-733.
- ? Completed the design and installation of a new Waste Project personnel double-wide trailer, at the C-730 trailers complex.

Future Accomplishments

- ? Complete the design and construction of landfill phases 6-11.
- ? Complete the connection of landfill phases 3, 4 & 5 to the leachate collection system.
- ? Complete the design and construction of roof replacements for C-746-Q and C-733.
- ? Complete the D&D of C-746-A West End Smelter.
- ? Complete the construction of the C-733 and C-746-Q Fire Protection Upgrades.
- ? Complete the design and construction of electrical upgrades of the C-746-A & B waste storage facilities.

**Scope**

Waste Infrastructure WBS: 04.03.10.01

- ? Provide project integration including task management, project control, baseline planning and BCPs.
- ? Provide oversight of the Waste Operations Subcontractor and other BJC Subcontractors.
- ? To complete design and construction of landfill phases 6-11.
- ? To complete the connection of landfill phases 3, 4, & 5 to the leachate collection system.

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<div><div><div>?</div><div>To complete the design and construction of the C-746-Q and C-733 waste storage facilities roof replacements.</div></div><div><div>?</div><div>To complete the D&amp;D of C-746-A West End Smelter.</div></div><div><div>?</div><div>To complete the construction of a 2-hour fire resistive wall in C-746-Q.</div></div><div><div>?</div><div>To complete the design and construction of the C-746-U Landfill Leachate Treatment Facility.</div></div><div><div>?</div><div>To complete Fire Protection Upgrades of C746Q and C733 (FY02 Carry over).</div></div><div><div>?</div><div>To Complete Electrical Upgrades of C746 A &amp; B (FY 02 Carry over).</div></div></div>		
Safety and Health Work Performance		
Introduction to the section		
<p>It is the core value of BJC that the safety and health of every worker and the public at large, and our environment, are the most important assets we are entrusted to protect. To accomplish this, an Integrated Safety Management System (ISMS), based on DOE's ISMS has been implemented that incorporates the Five Core Functions and is based on the Seven Guiding Principles. The objective of ISMS is to systematically integrate safety and environmental protection into the planning and execution of all work activities. The term safety encompasses Nuclear Safety, Industrial Safety, Industrial Hygiene, Occupational Health, Health Physics, and environmental issues. ISMS requirements flow-down to BJC subcontractors. The Five Core Functions are: (1) Define the scope of work, (2) Analyze hazards, (3) Develop and implement hazard controls, (4) Perform work within controls, and (5) Provide feedback and continuous improvement. The Seven Guiding Principles are (1) Line Management Responsibility for Safety, (2) Clear Roles and Responsibilities, (3) Competence commensurate with responsibility, (4) Balanced Priorities, (5) Identification of Safety Standards and Requirements, (6) Hazard Control Tailored to Work Being Performed, and (7) Operations Authorization.</p>		
<p>Before a subproject begins, several activities must be completed to demonstrate that all involved in the project have completed rigorous health and safety reviews and that all potential hazards of doing the work have been identified. The routine activities are conducted in accordance with standard operating procedures, activity hazard analyses, and Integrated Safety Management plans. Non-routine work will require a readiness assessment as necessary to ensure complete health, safety, and environmental reviews prior to work start. This assessment is conducted by people, experienced in similar kinds of work, with the right to examine all aspects of a project about to commence, and require that the project team provide documented evidence that any applicable requirements of the job have been met.</p>		
<b>REQUIREMENTS/DRIVERS</b>		
<div><div>BJC Contract DE-AC05-98OR22700, December 18, 1997</div><div>ISMS Description, BJC/OR-87, Revision 1, April 1999</div><div>Paducah Waste Operations Subcontract 23900-BA-RM005F</div><div>Paducah Hazardous Waste Permit</div><div>DOE Order 435.1</div><div>Operating Permit 073-00014 for C-746-S</div><div>Operating Permit 073-00015 for C-746-T</div><div>Operating Permit 073-00045 for C-746-U</div><div>Paducah Waste Operations Subcontract 23900-BA-RM005F</div><div>"Integrated Safety Management System Description, BJC-GM-1400, Revision 2, October 2001 and Integrated Safety Management System Supplement, BJC-GM-1401, Revision 0, December 2000"</div><div>Safety Analysis Report KY/EM-174, January 1997</div></div>		
As applicable, indicate other regulatory-related requirements		

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<p>CERCLA: N RCRA: Y DNFSB: N DOE Order: Y AEA: N UMTRCA: N State: Y OTHER: N</p> <p><b>WASTE VOLUMES</b> Please see attached waste performance metrics, as applicable. The waste quantities supporting the method of accomplishment and basis of estimate are consistent with data reported on the Waste Performance Metrics Form.</p> <p><b>PROJECT SCHEDULE</b> Please see attached project summary schedule, project detail schedule, and Milestone Status Summary Report.</p> <p><b>EXECUTION YEAR BASELINE</b> Please see attached Budgeted Cost of Work Scheduled Plan</p> <p><b>BASELINE BY YEAR</b> Please see attached Baseline by Year Report.</p>		